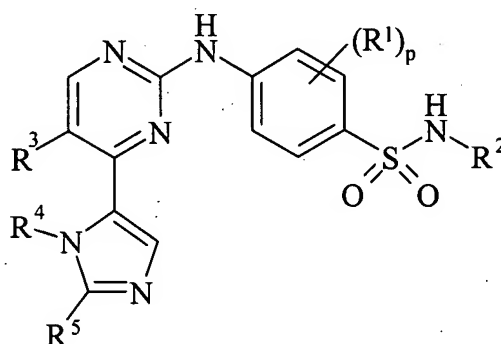


**IN THE CLAIMS:**

This listing of claims will replace all prior versions and listing of claims in the application.

**Listing of claims:**

Claim 1 (currently amended): A compound of formula (I):

**(I)**

wherein:

R<sup>1</sup> is halo, cyano, C<sub>1-3</sub>alkyl or C<sub>1-3</sub>alkoxy;

p is 0-2; wherein the values of R<sup>1</sup> may be the same or different;

R<sup>2</sup> is hydrogen, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, C<sub>2-4</sub>alkynyl, C<sub>3-6</sub>cycloalkyl, C<sub>3-6</sub>cycloalkylC<sub>1-3</sub>alkyl, a heterocyclyl or heterocyclylC<sub>1-3</sub>alkyl; wherein R<sup>2</sup> may be optionally substituted on carbon by one or more hydroxy, methyl, ethyl, methoxy, ethoxy, propoxy, trifluoromethyl, trifluoromethoxy, 2,2,2-trifluoroethoxy or cyclopropylmethoxy; and wherein if said heterocyclyl contains an -NH- moiety that nitrogen may be optionally substituted by one or more methyl, ethyl, acetyl, 2,2,2-trifluoroethyl or methoxyethyl;

R<sup>3</sup> is hydrogen, halo or cyano;

R<sup>4</sup> is C<sub>1-6</sub>alkyl or C<sub>1-6</sub>alkoxyC<sub>1-6</sub>alkyl;

R<sup>5</sup> is substituted methyl, optionally substituted C<sub>2-6</sub>alkyl, C<sub>3-6</sub>cycloalkyl or optionally substituted C<sub>2-6</sub>alkenyl; wherein said substituents are selected from one or more hydroxy, methoxy, ethoxy, propoxy, isopropoxy, trifluoromethyl, trifluoromethoxy, 2,2,2-trifluoroethoxy, phenyl, methylamino, ethylamino, dimethylamino, diethylamino, methylthio, ethylthio, propylthio, isopropylthio, methylsulphinyl, ethylsulphinyl, propylsulphinyl, isopropylsulphinyl, methylsulphonyl, ethylsulphonyl, propylsulphonyl, isopropylsulphonyl or cyclopropylmethoxy;

or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof; provided that the compound is not 4-(1-methyl-2-ethylimidazol-5-yl)-2-{4-[N-(tetrahydrofur-2-ylmethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-ethyl-imidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-isopropyl-imidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-isopropyl-imidazol-5-yl)-2-{4-[N-(cyclopropylmethyl) sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-isopropyl-imidazol-5-yl)-2-{4-[N-(tetrahydrofur-2-ylmethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-ethylimidazol-5-yl)-2-{4-[N-(cyclopropylmethyl) sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-ethyl-imidazol-5-yl)-2-[4-(N-cyclopropylsulphamoyl) anilino]pyrimidine; 4-(1-methyl-2-ethylimidazol-5-yl)-2-[4-(N-cyclobutyl-sulphamoyl) anilino]pyrimidine; or 4-(1-methyl-2-methoxymethylimidazol-5-yl)-2-{4-[N-(2-methoxyethyl) sulphamoyl]anilino}pyrimidine.

Claim 2 (**currently amended**): The A-compound of formula (I) according to claim 1 wherein p is 0; or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof.

Claim 3 (**currently amended**): The A-compound of formula (I) according to ~~either claim 1 or claim 2~~ wherein R<sup>2</sup> is hydrogen, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, C<sub>3-6</sub>cycloalkyl, C<sub>3-6</sub>cycloalkylC<sub>1-3</sub>alkyl or heterocyclylC<sub>1-3</sub>alkyl; wherein R<sup>2</sup> may be optionally substituted on carbon by one or more hydroxy, methoxy, ethoxy or trifluoromethyl; or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof.

Claim 4 (**currently amended**): The A-compound of formula (I) according to claim 1 ~~any one of claims 1-3~~ wherein R<sup>3</sup> is hydrogen; or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof.

Claim 5 (**currently amended**): The A-compound of formula (I) according to claim 1 ~~any one of claims 1-4~~ wherein R<sup>4</sup> is C<sub>1-4</sub>alkyl or C<sub>1-4</sub>alkoxyC<sub>1-4</sub>alkyl; or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof.

Claim 6 (**currently amended**): ~~The A-compound of formula (I) according to claim 1~~ ~~any one of claims 1-5~~ wherein R<sup>5</sup> is substituted methyl, or optionally substituted C<sub>2-6</sub>alkyl, C<sub>3-6</sub>cycloalkyl ~~or optionally substituted C<sub>2-6</sub>alkenyl~~; wherein said substituents are selected from one or more ~~hydroxy, methoxy, ethoxy, isopropoxy, phenyl, ethylamino, dimethylamino, methylthio, ethylthio, isopropylthio, ethylsulphinyl or ethylsulphonyl~~; or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof.

Claim 7 (**currently amended**): ~~The A-compound of formula (I) as claimed~~ ~~depicted in claim 1~~ wherein:

p is 0;

R<sup>2</sup> ~~is hydrogen, 2-ethoxyethyl, 2-methoxyethyl, 2-hydroxyethyl, 2,2,2-trifluoroethyl, 3-methoxypropyl, *t*-butyl, allyl, cyclopropyl, cyclobutyl, cyclopropylmethyl or tetrahydrofur-2-ylmethyl~~;

R<sup>3</sup> is hydrogen;

R<sup>4</sup> is methyl, ethyl, ~~propyl~~, isopropyl or 1-methoxyprop-2-yl; or

R<sup>5</sup> is methoxymethyl, 2-methoxyethyl, 2-hydroxy-2-methylpropyl, ~~propyl~~, isopropyl, ethyl, butyl, or isobutyl, cyclopropyl, 2-methyl-1-propenyl, 3-butenyl, 1-propenyl, 3,3-dimethylbutyl, phenethyl, dimethylaminomethyl, ethylaminomethyl, ethoxymethyl, methylthiomethyl, isopropylthiomethyl, ethylthiomethyl, ethylsulphinlmethyl, ethylsulphonylmethyl or isopropoxymethyl;

or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof;

provided that the compound is not 4-(1-methyl-2-ethylimidazol-5-yl)-2-{4-[N-(tetrahydrofur-2-ylmethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-ethyl-imidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-isopropyl-imidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-isopropyl-imidazol-5-yl)-2-{4-[N-(cyclopropylmethyl) sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-isopropyl-imidazol-5-yl)-2-{4-[N-(tetrahydrofur-2-ylmethyl)sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-ethylimidazol-5-yl)-2-{4-[N-(cyclopropylmethyl) sulphamoyl]anilino}pyrimidine; 4-(1-methyl-2-ethyl-imidazol-5-yl)-2-[4-(N-cyclopropylsulphamoyl) anilino]pyrimidine; 4-(1-methyl-2-

ethylimidazol-5-yl)-2-[4-(N-cyclobutyl-sulphamoyl) anilino]pyrimidine; or 4-(1-methyl-2-methoxymethylimidazol-5-yl)-2-{4-[N-(2-methoxyethyl) sulphamoyl]anilino}pyrimidine.

Claim 8 (**currently amended**): The A-compound of formula (I) as claimed ~~depicted in~~ claim 1 selected from:

4-(1,2-diethylimidazol-5-yl)-2-{4-[N-(2-ethoxyethyl)sulphamoyl]anilino}pyrimidine;

~~4-(1-isopropyl-2-methoxymethylimidazol-5-yl)-2-{4-[N-(2-ethoxyethyl)sulphamoyl]anilino}pyrimidine;~~

4-(1,2-diethylimidazol-5-yl)-2-{4-[N-(cyclopropyl)sulphamoyl]anilino}pyrimidine; and

4-(1,2-diethylimidazol-5-yl)-2-{4-[N-(allyl)sulphamoyl]anilino}pyrimidine;

~~4-(1-isopropyl-2-cyclopropylimidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine;~~

4-(1-methyl-2-propylimidazol-5-yl)-2-{4-[N-(2-ethoxyethyl)sulphamoyl]anilino}pyrimidine;

4-(1-ethyl-2-propylimidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine;

~~4-(1-isopropyl-2-propylimidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine;~~

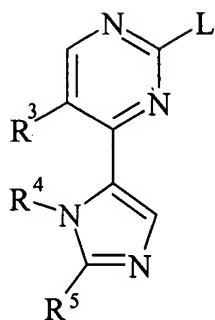
~~4-(1-isopropyl-2-ethylimidazol-5-yl)-2-{4-[N-(2-methoxyethyl)sulphamoyl]anilino}pyrimidine;~~  
and

~~4-(1-isopropyl-2-ethylimidazol-5-yl)-2-{4-[N-(2-ethoxyethyl)sulphamoyl]anilino}pyrimidine;~~

or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof;

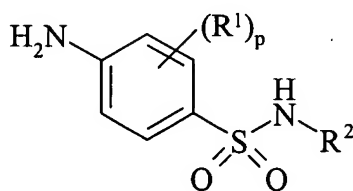
Claim 9 (**currently amended**): A process for preparing a compound of formula (I) or a pharmaceutically acceptable salt or an *in vivo* hydrolysable ester thereof as claimed in claim 1, which process (wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> and p are, unless otherwise specified, as defined in claim 1) comprises of:

*Process a)* reaction of a pyrimidine of formula (II):



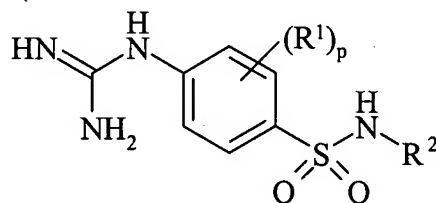
(II)

wherein  $L$  is a displaceable group; with an aniline of formula (III):



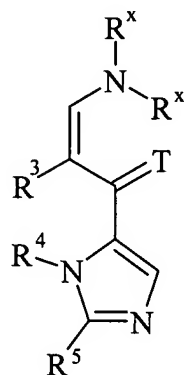
(III)

Process b) reacting a compound of formula (IV):



(IV)

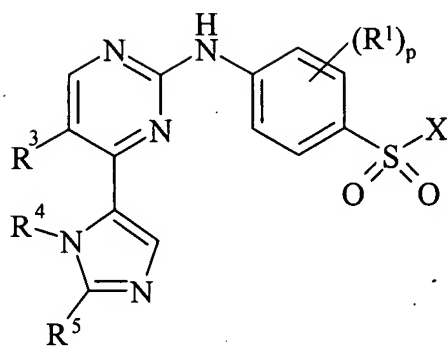
with a compound of formula (V):



(V)

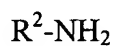
wherein  $T$  is O or S;  $R^x$  may be the same or different and is  $C_{1-6}$ alkyl;

Process c) reacting a pyrimidine of formula (VI):



(VI)

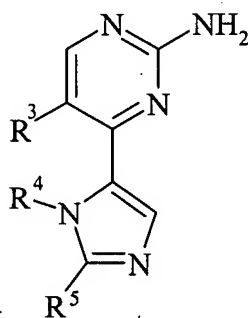
wherein X is a displaceable group; with an amine of formula (VII):



(VII)

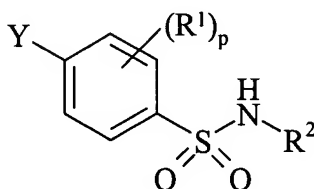
or

Process d) reacting a pyrimidine of formula (VIII)



(VIII)

with a compound of formula (IX):



(IX)

where Y is a displaceable group;

and thereafter, optionally if necessary:

- i) converting a compound of the formula (I) into another compound of the formula (I);
- ii) removing any protecting groups;
- iii) forming a pharmaceutically acceptable salt or *in vivo* hydrolysable ester.

Claim 10 (**currently amended**): A pharmaceutical composition which comprises a compound of the formula (I), or a pharmaceutically acceptable salt or *in vivo* hydrolysable ester thereof, according to claim 1 ~~any one of claims 1-8~~, in association with a pharmaceutically-acceptable diluent or carrier.

Claims 11-20 (**cancelled**).

Claim 21 (**new**): A method for producing a cell cycle inhibitory (anti-cell-proliferation) effect in a warm-blooded animal in need thereof, which comprises administering to said animal an effective amount of a compound of formula (I) or a pharmaceutically acceptable salt or *in vivo* hydrolysable ester thereof as claimed in claim 1.

Claim 22 (**new**): A method for the inhibition of CDK2, CDK4 or CDK6 in a warm-blooded animal in need thereof, which comprises administering to said animal an effective amount of a compound of formula (I) or a pharmaceutically acceptable salt or *in vivo* hydrolysable ester thereof as claimed in claim 1.

Claim 23 (**new**): A method for treating cancer in a warm-blooded animal in need thereof, which comprises administering to said animal an effective amount of a compound of formula (I) or a pharmaceutically acceptable salt or *in vivo* hydrolysable ester thereof as claimed in claim 1.

Claim 24 (**new**): The method of claim 23 wherein said cancer is selected from leukaemia, breast cancer, lung cancer, colorectal cancer, stomach cancer, prostate cancer, bladder cancer, pancreatic cancer, ovarian cancer, liver cancer, kidney cancer, skin cancer and cancer of the vulva.